

Members of the WQIP Committee: Jackie Eisenberg and David Jones, Planning Commission; Brian Daniel, E&S Technician; Lisa Kelley, County Administrator; Greg Wichelns and Richard Jacobs, Culpeper Soil & Water; Anthony Clatterbuck and Bill Brase, local homebuilders; Matt Criblez and Deirdre Clark, PD9; and Mike Lee, DCR.

**AN ORDINANCE TO ESTABLISH A LOCAL STORMWATER MANAGEMENT PROGRAM AND
OTHER PROVISIONS TO PROTECT THE RIVERS, STREAMS AND OTHER WATER
RESOURCES OF MADISON COUNTY**

ARTICLE I. GENERAL PROVISIONS

1-1. Short Title.

This ordinance shall be known and may be cited as the Madison County Water Protection Ordinance.

1-2. Authorization

This ordinance is adopted pursuant to authority conferred by Chapter 6, Article 1.1 (§10.1-603.1-et seq.) and Chapter 21, Article 1 (§10.1-2108) of Title 10.1 of the Virginia Code (1950), and pursuant to authority conferred by Chapter 22, Article 7 (§§ 15.2-2280, 15.2-2283 and 15.2-2284) of the Virginia Code (1950), as amended.

1-3. Purposes

The Board of Supervisors finds that this ordinance is necessary to protect the health, safety and welfare of the citizens of Madison County, and hereby declares that the specific purposes of this ordinance are to:

- (a) Promote the utilization of low impact development (LID) techniques, provision of stream buffers, and other practices in order to inhibit the deterioration of public waters resulting from the excavation of soil and other land disturbing activities;
- (b) Minimize the adverse impacts of increased stormwater runoff from land development upon public waters, by requiring that post-development stormwater runoff, as nearly as practicable, shall retain the existing pre-development runoff characteristics and site hydrology;
- (c) Maintain the integrity of existing stream channels for their biological functions, drainage and natural recharge of groundwater;
- (d) Establish provisions for long-term responsibility for and maintenance of stormwater management control devices and techniques to manage the quality and quantity of stormwater runoff; and to
- (e) Establish provisions for the integration of a local stormwater management program with the county's local erosion and sediment control program, flood insurance and floodplain management program and other programs requiring compliance prior to authorization of construction activities—in order to make the submission and approval of plans, issuance of permits, payment of fees and coordination of inspection and enforcement activities more convenient and efficient for county officials and employees as well as persons responsible for compliance with the programs;

1-4. Definitions

Accelerated Erosion: Erosion caused by development activities that exceeds the natural processes by which the surface of the land is worn away by the action of water, wind, or chemical action.

Average Land Cover Condition: A measure of the average amount of impervious surfaces within a watershed, assumed to be 16 %, as defined in the Virginia Stormwater Management Handbook.

Best Management Practice (BMP): ~~A practice, structural or nonstructural, designed to minimize the impacts of development on surface and groundwater systems.~~ means Schedules of activities, prohibitions of practices, including both a structural and nonstructural means, maintenance procedures, and other management practices to prevent or reduce the pollution of surface waters and groundwater systems from the impacts of land-disturbing activities. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.¹

Formatted: Font: (Default) Times
New Roman, 11 pt

Building: Any structure, either temporary or permanent, having walls and a roof, designed for the shelter of any person, animal, or property, which occupies more than 150 square feet of area.

Channel: A natural or artificial watercourse with a definite bed and banks that conducts continuously or periodically flowing water.

Channel, adequate: A channel that will convey the designated frequency storm event without overtopping the channel bank or causing erosive damage to the channel bed or banks²

County: The Madison County Board of Supervisors and the authorized officials, employees and agents acting on its behalf.

Detention: The temporary storage of storm runoff in a stormwater management practice with the goals of controlling peak discharge rates and providing gravity settling of pollutants.

Drainage Easement: A legal right granted by a landowner to a grantee allowing the use of private land for stormwater management purposes.

Flooding: A volume of water that is too great to be confined within the banks or walls of the stream, water body or conveyance system and that overflows onto adjacent lands, causing or threatening damage.

Floodplain: An area falling within the county's floodplain district, as defined in the Madison County Floodplain Management Ordinance.

Handbook: Is the Virginia Stormwater Management Handbook, First Edition 1999, Volume I & II, as amended.

Formatted: Font: Italic

Formatted: No underline

Impervious Cover: A surface composed of any material that significantly impedes or prevents natural infiltration of water into soil. The term "percent impervious" refers to the area of impervious cover within the site divided by the area of the site multiplied by 100.

Formatted: Font: (Default) Times
New Roman, 11 pt

¹ 4VAC50-60-10

² 4VAC50-60-10

Infiltration: The process of percolating stormwater into the subsoil.

Infiltration facility: A stormwater management facility that temporarily impounds runoff and discharges it via infiltration through the surrounding soil. While an infiltration facility may also be equipped with an outlet structure to discharge impounded runoff, such discharge is normally reserved for overflow and other emergency conditions. Since an infiltration facility impounds runoff only temporarily, it is normally dry during nonrainfall periods. Infiltration basin, infiltration trench, infiltration dry well, and porous pavement shall be considered infiltration facilities.³

Inspection: An on-site review of a project's compliance with the permit, the local stormwater management regulations, and any applicable design criteria, or an on-site review to obtain information or conduct surveys or investigations necessary in the enforcement of this ordinance.⁴

Integrated Management Practices: Low-impact development, micro scale, and distributed-management techniques to maintain predevelopment site hydrology.

⁵*Land disturbance or land disturbing activity:* A manmade change to the land surface that potentially changes its runoff characteristics, including any clearing, grading or excavation associated with a construction activity regulated pursuant to the federal Clean Water Act.

⁶*Linear Development Project:* A land development project that is linear in nature such as, but not limited to, (i) the construction of electric and telephone utility lines, and natural gas pipelines; (ii) construction of tracks, rights-of-way, bridges, communication facilities and other related structures of a railroad company; and (iii) highway construction projects.

Low Impact Development or LID: A strategy with the goal of maintaining or replicating the pre-development hydrology of a site (e.g., storage, infiltration and ground water recharge; volume and frequency of discharges) through the use of design techniques to create functionally equivalent hydrologic characteristics. Examples of such design techniques include: micro-scale stormwater retention and detention areas; reduction of impervious surfaces; lengthening of runoff flow paths and flow time; and preservation of environmentally sensitive site features, such as riparian buffers, wetlands, steep slopes, mature trees and woodlands, flood plains, and highly permeable soils.

Deleted: ,

Mitigation Plan: A plan, a component of a stormwater management/BMP plan, an erosion and sediment control plan, or an agreement in lieu of a plan, that describes how encroachments into a stream buffer will be mitigated through runoff treatment, revegetation, the addition of extra buffer areas, or other appropriate best management practices.

Owner: The owner or owners of the freehold of the premises or lesser estate therein, a mortgagee or vendee in possession, assignee of rents, receiver, executor, trustee, lessee or other person, firm or corporation in control of a property; the legal or beneficial owner of land, including those holding the right to purchase or lease the land, or any other person holding proprietary rights in the land.

³ [4VAC50-60-10](#)

⁴ [4VAC50-60-10](#)

⁵ Va Code 10.1-603.2

⁶ Va Code 10.1-603.2

Planning Area: The planning area is a designated portion of the parcel on which the land development project is located. Planning areas shall be established by delineation on a master plan. Once established, planning areas shall be applied consistently for all future projects.

Person: Any individual, corporation, partnership, association, cooperative, limited liability company, trust, joint venture, government, political subdivision or any other legal or commercial entity and any successor, representative, agent, agency or instrumentality thereof.

⁷Point source: Any discernible, confined, and discrete conveyance including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft from which pollutants are or may be discharged. This term does *not* include return flows from irrigated agriculture or agricultural stormwater runoff.

Formatted: Font: 11 pt, Italic

Formatted: Font: 11 pt

Formatted: Font: 11 pt, Italic

Formatted: Font: 11 pt

⁸Post-development: Conditions that reasonably may be expected or anticipated to exist after completion of the land development activity on a specific site or tract of land.

Formatted: Font: 11 pt, Italic

Formatted: Font: 11 pt

⁹Pre-development: Conditions that exist at the time that plans for the land development of a tract of land are approved by the plan approval authority. Where phased development or plan approval occurs (preliminary grading, roads and utilities, etc.), the existing conditions at the time prior to the first item being approved or permitted shall establish pre-development conditions.

Formatted: Font: 11 pt, Italic

Formatted: Font: 11 pt

Recharge: The replenishment of underground water reserves.

Redevelopment: The process of developing land that is or has been previously developed.

Regional Stormwater Management Facility: A facility or series of facilities designed to control stormwater runoff from a specific watershed, although only portions of the watershed may experience development.

Regional Stormwater Management Plan: A document describing how runoff from open space, existing development, and future planned development areas within a watershed will be controlled by coordinated design and implementation of regional stormwater management facilities.

Runoff or Stormwater Runoff: That portion of precipitation that is discharged across the land surface or through conveyances to one or more waterways.

Stream: Any permanent or intermittent watercourse as defined by USGS topographic maps.

Stream, intermittent: A natural watercourse, or portion thereof, which has a defined bed and banks within which water flows for only a portion of the year as a result of groundwater discharge and surface runoff from precipitation.

⁷ [4VAC50-60-10](#)

⁸ [4VAC50-60-10](#)

⁹ [4VAC50-60-10](#)

Stream, perennial: A natural watercourse, or portion thereof, that has a defined bed and banks within which water flows throughout the year as a result of groundwater discharge or surface runoff from precipitation.

Stormwater: means precipitation that is discharged across the land surface or through conveyances to one or more waterways and that may include stormwater runoff, snow melt runoff, and surface runoff and drainage.¹⁰

Stormwater detention facility or detention facility: A stormwater management facility that temporarily impounds runoff and discharges it through a hydraulic outlet structure to a downstream conveyance system. While a certain amount of outflow may also occur via infiltration through the surrounding soil, such amounts are negligible when compared to the outlet structure discharge rates and are, therefore, not considered in the facility's design. Since a detention facility impounds runoff only temporarily, it is normally dry during nonrainfall periods.¹¹

Stormwater Drainage System: The collection and conveyance of storm and other surface flows through the land development project in a manner to prevent increased flooding of structures and associated properties and accelerated erosion of channels. Stormwater drainage systems include stormwater conveyance channels, storm sewers and culverts.

Stormwater Management: The collection, conveyance, storage, treatment, and disposal of stormwater runoff in a manner to prevent accelerated channel erosion, increased flood damage, and water quality degradation.

Stormwater management facility: A device that controls stormwater runoff and changes the characteristics of that runoff including, but not limited to, the quantity and quality, the period of release or the velocity of flow.¹²

Stormwater Management Design Manual: Refers to the Virginia Stormwater Management Handbook and any LID handbook acceptable to the county.

Stormwater management plan: A stormwater design plan and, if applicable, a stormwater concept plan.

Stormwater design plan: A set of drawings and supporting documents comprising all of the information and specifications for the systems and structures that will be used to convey and control stormwater runoff for a particular property.

Stormwater retention facility or retention facility means a stormwater management facility that includes a permanent impoundment, or normal pool of water, for the purpose of enhancing water quality and, therefore, is normally wet, even during nonrainfall periods. Storm runoff inflows may be temporarily stored above this permanent impoundment for the purpose of reducing flooding, or stream channel erosion.¹³

Stormwater Treatment Practices: Measures, structural or nonstructural, which prevent or reduce point source or non-point source pollution inputs to stormwater runoff and public waters.

¹⁰ 4VAC50-60-10

¹¹ 4VAC50-60-10

¹² 4VAC50-60-10

¹³ 4VAC50-60-10

Watercourse: A permanent or intermittent stream or other body of water, either natural or man-made, which gathers or carries surface water.

Water Quality Volume: The volume of water equal to the first ½ inch of runoff multiplied by the impervious surface of the land development project.

Watershed: A defined land area commonly drained by a river, stream, and drainage ways.

Wetland: An area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

ARTICLE II. STORMWATER MANAGEMENT PLANS

2-1. Compliance with article prerequisite to issuance of permits.

No building permit, zoning permit, erosion and sediment control permit, or any other permit authorizing an activity that involves any land disturbing activity shall be issued unless and until the requirements of this article have been met.

2-2. Applicability to land-disturbing activities.

(a) No person shall undertake any land-disturbing activity (including, without limitation, the development or redevelopment of any land for residential, commercial, industrial or institutional use) until he has obtained approval from the County. Applications for approval shall be accompanied by a proposed final stormwater management plan and all applicable fee(s) as set forth in a schedule approved by the Board of Supervisors.

(1) In the case of land-disturbing activity for which an erosion and sediment control plan is required under the Madison County Erosion and Sediment Control ordinance, the application shall be submitted simultaneously with the proposed Erosion and Sediment Control plan.

Formatted: No underline

(2) No grading, building or other permit shall be issued for a property unless a stormwater permit application has been approved that is consistent with this ordinance and unless the applicant has certified that all land clearing, construction, disturbance, land development and drainage will be done according to the approved permit conditions.¹⁴

Formatted: No underline

(b) The following land disturbing activities are exempt from the requirements of this article:¹⁵

(1) Permitted surface or deep mining operations and projects, or oil and gas operations and projects conducted under the provisions of Title 45.1 of the Virginia Code;

(2) Clearing of lands specifically for agricultural purposes and the management, tilling, planting or harvesting of agricultural, horticultural, or forest crops;

¹⁴ Va. Code 10.1-603.9

¹⁵ Va. Code 10.1-603.8

(3) Single-family residences separately built and disturbing less than one acre and not part of a larger common plan of development or sale (including additions or modifications to existing single-family detached residential structures);

Formatted: No underline

(4) Land disturbing activities that disturb less than one acre of land area or activities that are part of a larger common plan of development or sale that is one acre or greater of disturbance; provided, however, that land disturbing activities undertaken in connection with a project that will create 10,000 or more square feet of impervious surface shall be subject to the requirements of this article;

Formatted: No underline

(5) Linear development projects, provided that: (i) less than one acre of land will be disturbed per outfall or watershed, (ii) there will be insignificant increases in peak flow rates, and (iii) there are no existing or anticipated flooding or erosion problems downstream of the discharge point;

(6) Discharges to a sanitary sewer or a combined sewer system;

(7) Activities under a state or federal reclamation program to return an abandoned property to an agricultural or open land use; and

(8) Routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original construction of a project, which disturbs less than five acres of land.

2-3. Concept Plans

Deleted: , optional

(a) The submission of a stormwater management concept plan is optional; however, an applicant who obtains approval of a concept plan will qualify for an expedited review of the required stormwater design plan, provided that the design plan is based on site conditions and an approach to stormwater management which are not significantly different than those described in the approved concept plan.

Deleted: An

Deleted: stormwater

(b) Prior to the submission of a stormwater management design plan, the applicant may submit a stormwater management concept plan to the County for approval. The purpose of a concept plan is to evaluate the environmental characteristics of a project site, identify the potential impacts of the proposed development of the site on water resources, and to allow the County an opportunity to assess the effectiveness and acceptability of the measures proposed for managing stormwater generated at the project site.

Deleted: a

(c) A stormwater management concept plan shall include the following:

Deleted: b

(1) A written summary explaining how LID has been utilized;

(2) A map (or maps) indicating the location of existing and proposed buildings, roads, parking areas, utilities, structural stormwater management and sediment control facilities. The map(s) will also clearly show proposed land use with tabulation of the percentage of surface area to be adapted to various uses; drainage patterns; locations of utilities, roads and easements; the limits of clearing and grading; written description of the site plan and justification of proposed changes to natural conditions may also be required.

(3) A written or graphic inventory of the natural resources at the site and surrounding area as it exists prior to the commencement of the project and a description of the

watershed and its relation to the project site. This description should include a discussion of soil conditions, forest cover, topography, wetlands, and other native vegetative areas on the site. Particular attention should be paid to environmentally sensitive features that provide particular opportunities or constraints for development.

(4) A hydrologic/hydraulic analysis of the downstream watercourse for all concentrated surface waters that will be discharged onto a downstream property.

Deleted: developed

(5) Low impact development site planning, to the maximum extent practicable, in accordance with the low impact development design manuals.

(6) A written description of the anticipated maintenance burden for any proposed stormwater management facility.

(7) Additional information may be required, as deemed necessary by the Administrator to evaluate the concept plan.

(d) Prior to approval of a stormwater management concept plan, the Administrator may require a site visit with the applicant, or applicant's representative, to field-verify site conditions and the proposed approach to stormwater management.

Deleted: c

(e) The Administrator shall act on a proposed stormwater management concept plan within twenty-one (21) days after it has been officially submitted for approval, by either approving or disapproving the plan in writing and giving with any disapproval specific reasons therefore. The reasons for disapproval shall be set forth either in a separate document or on the proposed concept plan itself. The Administrator shall make a good faith effort to identify all deficiencies, if any, as part of a disapproval. For the purposes of this paragraph the phrase "officially submitted for approval" shall refer to circumstances in which all required submission materials and information have been received as part of a single, complete application package.

Deleted: d

2-4. Final stormwater plans required.

Any person seeking approval of a final stormwater management plan shall submit to the County a permit application on a form provided by the County, along with the proposed final stormwater management plan and the applicable fee(s) as established on a schedule approved by the Board of Supervisors. The final stormwater management plan shall consist of a stormwater design plan, and, if applicable, a previously-approved stormwater management concept plan.

2-5. Waivers.

(a) A person may request a waiver of one or more of the criteria required by this article. Waivers may be granted by the Administrator. A waiver request shall be made in writing by the owner of the property that is subject to the requirements of this article, or the owner's authorized agent or representative, or if different than the owner, by the person who is the applicant for the required stormwater permit. A waiver request must include descriptions, drawings, calculations and other information necessary to evaluate the requested waiver.

(b) Waivers of the LID requirement may be granted, provided that:

(1) Stormwater runoff is addressed through conventional stormwater management;

(2) A proposed stormwater plan utilizes, to the maximum extent practicable, LID techniques in accordance with design manuals acceptable to the County, and the waiver request is supported by data on calculation sheets; and

(3) At least one of the following conditions is met to the satisfaction of the County:

- (i) Meeting the minimum on-site requirements is not feasible due to the natural or existing physical characteristics of the site; or
- (ii) Site conditions are such that compliance with Low Impact Development will conflict with existing State or Madison County laws, ordinances, regulations or policies.

(c) The Administrator may grant a waiver from strict compliance with stormwater management requirements other than those referenced in subparagraph (b), above; however, in order for any such waiver to be considered, the applicant must demonstrate to the satisfaction of the Administrator:

(1) Acceptable mitigation measures can provide a reasonably equivalent level of stormwater management, and the requested deviation or variance constitutes the minimum deviation necessary to afford relief;

(2) The request is not based on economic hardship alone;

(3) The applicant demonstrates that immediate downstream waterways will not be subject to:

- (i) accelerated deterioration of existing culverts, bridges, dams, and other structures;
- (ii) deterioration of biological functions or habitat;
- (iii) accelerated streambank or streambed erosion or siltation; or
- (iv) increased threat of flood damage to public health, life, and property; and

(4) At least one of the following conditions must apply, in whole or in part:

- (i) The applicant demonstrates that the proposed activity is not likely to impair attainment of the objectives of this ordinance;
- (ii) The County finds that meeting the minimum on-site requirements is not feasible due to the natural or existing physical characteristics of the site;
- (iii) The location of the land development project in the watershed is such that on-site stormwater management will result in increased flows on the main stream. The applicant or property owner must provide supporting hydrologic analysis in accordance with the stormwater management design manuals;
- (iv) An off-site stormwater management facility provides the required controls;
- (v) An existing regional stormwater management facility provides the required controls, and the property owner agrees to a pro-rata share contribution.

(d) Any improvement, alteration or maintenance activity, undertaken with respect to an existing stormwater management facility, if such work will not degrade the quality of any surface water discharge, as determined by the County, may be granted a waiver from the strict requirements of this article.

2-6. Procedures for plan submission and review.

(a) Each stormwater design plan shall contain sufficient information to demonstrate compliance with all applicable requirements of this article and with applicable technical criteria set forth in article III of this ordinance.

(b) Each stormwater design plan shall include, in addition to information from any previously approved concept plan, the following:

(1) General Information

- (i) Description of the project and proposed design, including how LID has been used to address water quality, water quantity, and stormwater drainage requirements;
- (ii) Proposed erosion and sediment controls, and proposed temporary and permanent stormwater management facilities;
- (iii) Project sequence of construction;
- (iv) Maps depicting all pertinent stormwater management information necessary for review of the plan as identified in the stormwater management design manuals, including, but not limited to topographic maps of the drainage area, soils maps, and a plan view of the development project;
- (v) Identification of proposed drainage easements;
- (vi) A copy of any previously-approved stormwater concept plan;
- (vii) Physical surveys and calculations consistent with engineering practices, to verify pre-development stream characteristics;
- (viii) Calculations for each point of discharge from the land disturbance, to evaluate flooding and channel erosion impacts to receiving streams due to land-disturbing activities. Calculations shall include any runoff from the balance of the watershed which also contributes to that point of discharge. Flooding and channel erosion impacts shall be evaluated taking the entire upstream watershed into account, including the modifications from the planned land disturbance. Good engineering practices and calculations shall be used to demonstrate post-development stream characteristics, flooding and channel erosion impacts.
- (ix) For purposes of computing pre-development runoff, all pervious lands in the site shall be assumed prior to development to be in good condition (if the lands are pastures, lawns, or parks), with good cover (if the lands are woods) or with conservation treatment (if the lands are cultivated) regardless of conditions existing at the time of computation. LID shall assume that land is forested, in good condition.
- (x) All stormwater management plans shall be sealed and signed by a licensed professional engineer, who shall endorse upon the plan a certificate signed by him verifying that the plan meets all submittal requirements and technical specifications required by this article.

(2) Low Impact Development Sites

- (i) Integrated management practices identified on a map and corresponding design details in accordance with the low impact development design manuals.
- (ii) Hydrologic computations to determine low impact development stormwater requirements in accordance with the low impact development design manuals.
- (iii) Hydrologic evaluation and design details for supplemental conventional stormwater management facilities in the event that integrated management practices alone cannot meet site stormwater management requirements.

- (iv) Identification of all storm drainage easements needed to establish locations of integrated management practices.
- (v) Installation specifications for all integrated management practices.
- (vi) A maintenance plan identifying the parts or components of the integrated management practices which need to be maintained to ensure continued proper functioning of the practices. A maintenance agreement in a form acceptable to Madison County shall be recorded with the Clerk of Court of Madison County.

(3) Stormwater Management Facilities

- (i) Stormwater management facilities identified on a map, including details, plan, profile, cross sections, and other pertinent data necessary for review as identified in the stormwater management design manuals.
- (ii) Comprehensive hydrologic and hydraulic design calculations, including all assumptions and criteria, for the pre-development and post-development conditions for the design storms specified in this ordinance or the stormwater management design manuals.
- (iii) If infiltration facilities are proposed, the location of existing and proposed wells and septic system drain fields shall be shown along with an analysis that supports the location of the infiltration facility in the soil type identified.
- (iv) A geotechnical report with recommendations and earthwork specifications in accordance with requirements in the stormwater management design manuals. The geotechnical engineer shall acknowledge on the design plan that the geotechnical recommendations have been incorporated into the design of stormwater management facilities.
- (v) A landscaping plan describing the vegetative stabilization and management techniques to be used within and adjacent to the stormwater management facility in accordance with standards in the stormwater management design manuals.
- (vi) Identification of all easements needed for inspection and maintenance of stormwater management facilities in accordance with installation specifications in the County approved stormwater management design manuals.
- (vii) A maintenance plan identifying the parts or components of the stormwater management facility that need to be maintained to ensure continued proper functioning of the facility. A maintenance agreement in a form acceptable to Madison County shall be recorded with the Clerk of Court of Madison County.

(4) Stormwater drainage systems

- (i) Hydrologic and hydraulic design calculations, including calculations for offsite drainage systems.
- (ii) Design specifications in accordance with the stormwater management design manuals.
- (iii) Identification of all easements needed for inspection and maintenance of drainage systems in accordance with specifications in the stormwater management design manuals.
- (iv) All existing and proposed drainage systems, natural or manmade, shall be analyzed according to the Virginia Erosion and Sediment Control Regulations Minimum Standard 19 in effect at the time of application.

| **2-7. Plan Approval¹⁶**

(a) The Administrator shall act on a proposed final stormwater management plan after it has been officially submitted for approval, by either approving or disapproving the plan in writing and giving with any

| ¹⁶ [4VAC50-60-130](#)

disapproval specific reasons. The reasons for disapproval shall be set forth either in a separate document or on the proposed plan itself. The Administrator shall make a good faith effort to identify all deficiencies, if any, as part of any disapproval. For the purposes of this paragraph the phrase “officially submitted for approval” shall refer to circumstances in which all required submission materials and information have been received as part of a single, complete application package. Within 15 days after receipt of an application seeking approval of a final stormwater management plan, the Administrator shall render a determination as to whether the application is complete, and for an incomplete application the Administrator shall notify the applicant in writing of the submission materials and information necessary to complete the application.

(1)The Administrator shall act within 60 days of the date on which a proposed final plan has been officially submitted for approval. However, in cases where there has been a previously-approved stormwater management concept plan, the plan approving authority shall act within 30 days of the date on which a proposed final plan has been officially submitted for approval.

(2)The Administrator shall act on any proposed final plan that has been previously disapproved, within 45 days after the re-submitted plan has been officially submitted for approval.

(3)Upon receipt of an application seeking approval of a proposed final stormwater management plan, all plans, profiles, and specifications shall be distributed by the Administrator to the appropriate county departments, consultants, and state agencies for review and comment, so as to facilitate a complete review within the above-referenced time frames.

(b)Upon determining that a proposed final stormwater management plan meets applicable requirements of this ordinance, prior to issuing a permit under this article, the County shall require:

(1)*Required permits*--Evidence of all applicable wetlands and stream impact permits required by local, state, and federal law;

(2)*Performance guarantee*—The County shall require a performance guarantee to ensure that the stormwater practices are installed by the land disturber applicant as required by the approved stormwater management plan, and to ensure that measures could be taken by the County, at the applicant's expense, should the applicant fail to initiate or maintain appropriate actions which may be required of him under the approved plan. If the County takes such action upon a failure by the applicant, the County may collect from the applicant for the difference should the amount of the reasonable cost of such action exceed the amount of the security held.

(i)The amount of the performance guarantee shall be the total estimated construction cost of the stormwater management practices approved within the stormwater management plan, plus a reasonable allowance for estimated administrative costs, inflation, and potential damage to existing property and improvements, not to exceed 25% of the estimated construction costs. The applicant shall provide an estimate of costs for the purpose of determining the amount of the performance guarantee required by this section.

(ii)The required performance guarantee may be in the form of a certified check or cash escrow; a personal, corporate or property bond, with surety; a contract for construction of the required improvements and the contractor's bond, with surety; or a bank or savings institution's letter of credit on certain designated funds.

(iii) Within 60 days of the final completion of the requirements of the approved stormwater management plan, the performance guarantee or the unexpended or unobligated portion thereof shall be refunded to the applicant or terminated. Notwithstanding the foregoing, a portion of the performance guarantee shall be retained, in an amount equal to the estimated cost of replacement of the landscaping measures set forth within the approved stormwater management plan. The retained landscaping guarantee shall be maintained for a period of one (1) year after installation, and shall then be released upon verification by the County that (a) any necessary replacement has been completed in accordance with the approved plan, or (b) that no landscaping replacement is necessary.

(3) *Maintenance obligation*--A fully-executed maintenance easement agreement and maintenance covenant, which shall be binding upon all subsequent owners of land served by the stormwater management facilities.

(i) The Maintenance Easement Agreement shall provide for access to the stormwater management facility at reasonable times for periodic inspection by the County, its employees or agents, and for regular or special assessments of property owners to ensure that the facility is maintained in proper working condition to meet design standards and any other provisions established by this ordinance. The easement agreement shall include a right of entry in favor of the County for purposes of conducting inspections of the stormwater facilities and performing work as necessary to abate a public nuisance or correct necessary maintenance. The easement agreement shall be recorded by the County in the land records prior to issuance of a stormwater permit.

(ii) The owner of property on which any stormwater maintenance facility is located shall be required to maintain the facility in good working order. At a minimum, the maintenance obligation shall include:

- (A) adherence to a specific schedule of required maintenance necessary to ensure proper function of the stormwater management facility;
- (B) ongoing inspections, at intervals appropriate to the type of facility, as necessary to verify proper performance of the facility;
- (C) maintenance of written records of inspections and maintenance and repairs performed, and annual written certifications submitted to the Administrator that the facility is in good working order; and
- (D) In the event that a property owner fails or refuses to meet the maintenance requirements of this ordinance, and a facility is not working properly, then the Administrator may take action necessary to place the facility in good working order, and following notice from the County, the property owner shall reimburse the County for costs incurred by it.

Formatted: No underline

Formatted: No underline

Formatted: No underline

Deleted: ¶

Formatted: No underline

Formatted: No underline

Formatted: No underline

Formatted: No underline

Formatted: No underline

Formatted: No underline

Formatted: No underline

Formatted: No underline

(4) *Evidence of required drainage easements.*

2-8. Effect of approval.¹⁷

Deleted: ¶

(a) Following approval of a stormwater management plan:

¹⁷ 4VAC50-60-130

(1) The applicant shall comply with all requirements of the approved stormwater management plan, and shall certify that all land clearing, construction, land development and drainage will be done according to the approved plan.¹⁸.

Deleted: All land disturbing activity (including, without limitation, land clearing, construction, and development) and all drainage shall be conducted only in accordance with the approved stormwater management plan, and only in the area(s) specified in the approved plan

(2) The land development project shall be conducted only within the area specified in the approved plan.¹⁹

(3) As a condition of approval, the County shall have a right of entry, after giving notice to the owner, occupier or operator of the land development project, to conduct periodic inspections of the project²⁰ ; and

Deleted: land disturbing activity and work that is the subject of the approved plan, upon reasonable notice to the permittee

(4) The person responsible for implementing the approved plan shall conduct monitoring and submit reports as the Administrator may require, to ensure compliance with the approved plan and to determine whether the plan provides effective stormwater management.²¹

Deleted: 3

(5) No substantive changes shall be made to the approved plan without prior review and written approval by the County.

(b) No transfer, assignment, or sale of the rights granted by virtue of an approved stormwater management plan shall be made unless a written notice of transfer is filed with the County and the transferee certifies agreement to comply with all obligations and conditions of the approved plan.

2-9. Expiration and extension

Formatted: Font: Bold

An approved stormwater management plan shall be valid for a period of at least two (2) years from the date of approval. A single two (2) year extension may be granted by the Madison County Board of Supervisors upon a written request by the applicant to the Administrator. Such request shall be made not more than sixty (60) days, nor fewer than thirty (30) days prior to the date on which the approved plan will expire. The Administrator shall acknowledge receipt of the request, and the Board shall make a decision on the requested extension within thirty (30) days of receipt of the request. If such extension is granted, the Board may require that performance guarantees as set forth herein be modified and/or extended as a condition of approval of the extension request.

ARTICLE III. STORMWATER MANAGEMENT CRITERIA

Deleted: TECHNICAL

3-1. Criteria, generally.

(a) Stormwater management facilities, including best management practices, shall be constructed, installed and maintained consistent with the minimum technical requirements set forth within the Virginia Stormwater Management Program (VSMP) Permit Regulations (4VAC50-60 et seq.) effective January 29, 2005.

Deleted: Virginia Stormwater Management Regulations, 1998, as amended (4VAC3-20-10 et seq.)

(b) The following shall apply to all development and land-disturbing activities that are subject to the requirement of an approved stormwater management plan.²²

Deleted: .

¹⁸ 4VAC50-60-130

¹⁹ 4VAC50-60-130

²⁰ 4VAC50-60-130

²¹ 4VAC50-60-130

(1) Determination of flooding and channel erosion impacts to receiving streams due to land-disturbing activities shall be measured at each point of discharge from the land disturbance and such determination shall include any runoff from the balance of the watershed which also contributes to that point of discharge

Formatted: Font: 11 pt

(2) The specified design storms shall be defined as either (i) 24-hour storm using the rainfall distribution recommended by the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) when using NRCS methods, or (ii) as the storm of critical duration that produces the greatest required storage volume at the site when using a design method such as the Modified Rational Method.

Deleted: a 2-year and 10-year

Formatted: Font: 11 pt

Formatted: Font: 11 pt

Formatted: Font: 11 pt

Formatted: Font: 11 pt

(3) For purposes of computing runoff, all pervious lands in the site shall be assumed prior to development to be in good condition (if the lands are pastures, lawns, or parks), with good cover (if the lands are woods), or with conservation treatment (if the lands are cultivated); regardless of conditions existing at the time of computation.

(4) Construction of stormwater management facilities or modifications to channels shall comply with all applicable laws and regulations. Evidence of approval of all necessary permits shall be presented.

(5) Impounding structures that are not covered by the Impounding Structure Regulations (4VAC50-20) shall be engineered for structural integrity during the 100-year storm event.

(6) Pre-development and post-development runoff rates shall be verified by calculations that are consistent with good engineering practices.

(7) Outflows from a stormwater management facility or stormwater conveyance system, shall be discharged to an adequate channel.

(8) Proposed residential, commercial, or industrial subdivisions shall apply these stormwater management criteria to the land disturbance as a whole. Individual lots in new subdivisions shall not be considered separate land-disturbing activities, but rather the entire subdivision shall be considered a single land development project. Hydrologic parameters shall reflect the ultimate land disturbance and shall be used in all engineering calculations.

(9) All stormwater management facilities shall have an inspection and maintenance plan that identifies the owner and the responsible party for carrying out the inspection and maintenance plan.

(10) Construction of stormwater management impoundment structures within a Federal Emergency Management Agency (FEMA) designated 100-year floodplain shall be avoided to the extent possible. When this is unavoidable, all stormwater management facility construction shall be in compliance with all applicable regulations under the National Flood Insurance Program, 44 CFR Part 59.

(11) Natural channel characteristics shall be preserved to the maximum extent practicable.

(12) Land-disturbing activities shall comply with state and local Erosion and Sediment Control laws and attendant regulations.

²² 4VAC50-60-50 (A)-(M)

(13) Flood control and stormwater management facilities that drain or treat water from multiple development projects or from a significant portion of a watershed may be allowed in Resource Protection Areas defined in the Chesapeake Bay Preservation Act, provided that (i) the local government has conclusively established that the location of the facility within the Resource Protection Area is the optimum location; (ii) the size of the facility is the minimum necessary to provide necessary flood control, stormwater treatment, or both; and, (iii) the facility must be consistent with a stormwater management program that has been approved by the board.

3-2. Low Impact Development (LID).

(a) Low impact development site planning, construction and maintenance shall be used to control stormwater runoff at the source and more closely approximate predevelopment runoff conditions.

(c) The design criteria, hydrologic analysis and computational procedures for low impact development techniques shall be those identified in LID design manuals acceptable to the County.

(d) Storm drainage easements shall be recorded to identify the locations of low impact development practices on lots or parcels. A property owner shall not remove or structurally alter any low impact development practice without prior written approval from the program administrator.

(e) Stormwater runoff from parking lots shall be diverted through infiltration facilities, stormwater management filtering systems, or buffers.

Comment [VIIP1]: LID design does not supersede VA. Code, 4VAC50-30 et. seq., 4VAC50-60 et. seq.

Deleted: (b) Low impact development stormwater management design plans developed consistent with the requirements of this subsection shall be considered to meet the water quality and quantity performance criteria set forth within this article

Deleted: .¶

3-3. Stormwater treatment required.

(a) Unless determined to be exempt, all land disturbing activity shall be required to treat the quality of stormwater runoff. Compliance with the water quality requirement may be achieved by applying the performance-based or the technology-based criteria set forth within the Virginia Stormwater Management Handbook as amended to either the site or a planning area.²³

Formatted: No underline

Deleted: Stormwater treatment shall comply with water quality

(b) Stormwater runoff generated from land development and land use conversion activities shall not discharge stormwater runoff directly into a jurisdictional wetland or public body of water without adequate treatment. Where any such discharge is proposed, the impact of the proposal on wetland functions shall be addressed using a method acceptable to the County. In no case shall the impact on functions be any less than allowed by the United States Army Corps of Engineers or the Virginia Department of Environmental Quality.

(c) Stormwater discharges to critical areas with sensitive resources may be subject to additional criteria, or may need to utilize or restrict certain stormwater management practices, at the discretion of the County. Prior to submission of a stormwater design, applicants should consult with the Program Administrator to determine if they are subject to additional stormwater design requirements.

(d) Stormwater discharges from land uses or activities with higher potential pollutant loadings may require the use of specific structural BMPs and pollution prevention practices.

²³ 4VAC50-60-60

3-4. Performance-Based Water Quality Criteria

(a) Stormwater treatment practices that are designed and constructed in accordance with design and sizing criteria set forth within the Virginia Stormwater Management Handbook as amended will be presumed to meet minimum water quality performance standards.

(b) For land disturbing activities, the calculated post-development non-point source pollutant runoff load shall be compared to the calculated pre-development load based upon the average land cover condition or the existing site condition. A BMP shall be located, designed, and maintained to achieve the target pollutant removal efficiencies specified in Table 1 (see section 3-6, below) to effectively reduce the pollutant load to the required level, based upon the following four applicable land development situations for which the performance criteria apply:

Deleted: development

Deleted: will

Deleted: of this article

(1) Situation 1:²⁴ where the existing percent of impervious cover is less than or equal to the average land cover condition, and the proposed improvements will create a total percent impervious cover which is less than the average land cover condition, then no reduction in the post-development pollutant discharge is required.

Deleted: age

(2) Situation 2:²⁵ where the existing percent of impervious cover is less than or equal to the average land cover condition, and the proposed improvements will create a total percent impervious cover which is greater than the average land cover condition, then the post-development pollutant discharge shall not exceed the existing pollutant discharge based on the average land cover condition.

Deleted: age

Deleted: of

Deleted: after development

(3) Situation 3:²⁶ where the existing percentage of impervious cover is greater than the average land cover condition, then the post-development pollutant discharge shall not exceed:

Deleted: after development

(i) The pollutant discharge based on existing conditions, less ten percent (10%); or

(ii) The pollutant discharge based on the average land cover condition, whichever is greater.

(4) Situation 4:²⁷ where the existing percent impervious cover is served by an existing stormwater management BMP that addresses water quality, then the post-development pollutant discharge shall not exceed the existing pollutant discharge, based on the existing percent impervious cover while served by the existing BMP. The existing BMP shall be shown to have been designed and constructed in accordance with proper design standards and specifications, and to be in proper functioning condition.

Deleted: after development

3-5. Technology-Based Water Quality Criteria²⁸

For land-disturbing activities, post-development stormwater runoff from impervious cover shall be treated by an appropriate BMP as required by the post-development condition percent impervious cover as specified in Table 1, below (see section 3-6, below). The selected BMP shall be located, designed, and maintained to perform at the target pollutant removal efficiency specified in Table 1. Design standards and specifications

Deleted: post-developed

Deleted: 5

Deleted: of this article

Deleted: section 3-5

²⁴ 4VAC50-60-60(B)(1)

²⁵ 4VAC50-60-60(B)(2)

²⁶ 4VAC50-60-60(B)(3)

²⁷ 4VAC50-60-60(B)(4)

²⁸ 4VAC50-60-60(C)

for the BMPs in Table 1, which meet the required target pollutant removal efficiency shall be consistent with those provided in the Virginia Stormwater Management Handbook.

Deleted: specified in section 3-5

3-6. Water Quality BMP table.²⁹

Table 1

Water Quality BMP*	Target Phosphorous Removal Efficiency	Percent Impervious Cover
Vegetated filter strip	10%	16-21%
Grassed swale	15%	16-21%
Constructed wetlands	20%	22-37%
Extended detention (2 x WQ Volume)	35%	22-37%
Retention basin I (3 x WQ Volume)	40%	22-37%
Bioretention basin	50%	38-66%
Bioretention filter	50%	38-66%
Extended detention-Enhanced	50%	38-66%
Retention basin II (4 x WQ Volume)	50%	38-66%
Infiltration (1 x WQ Volume)	50%	38-66%
Sand filter	65%	67-100%
Infiltration (2 x WQ Volume)	65%	67-100%
Retention basin III (4 x WQ Volume with aquatic bench)	65%	67-100%

*Innovative or alternative BMPs not included in this table may be allowed at the discretion of the County.
Innovative or alternate BMPs not included in this table, which target appropriate non-point source pollution other than phosphorous, may be allowed at the discretion of the County.

3-8. Stream Channel Erosion³⁰

(a) Properties and receiving waterways downstream of any land-disturbing activity shall be protected from erosion and damage due to changes in runoff rate of flow and hydrologic characteristics, including but not limited to, changes in volume, velocity, frequency, duration, and peak flow rate of stormwater runoff in accordance with the minimum design standards set out in this section.

(b) Compliance with state and local Erosion and Sediment Control laws and regulations is required.

(c) The County may determine that some watersheds or receiving stream systems require enhanced criteria in order to address the increased frequency of bank-full flow conditions (top of bank) brought on by land-

Formatted: Font: 11 pt

Formatted: Font: 11 pt

Formatted: Font: 11 pt

Formatted: Font: 11 pt

Comment [VIIP2]: See Flooding, Water Quality and Flooding are the same.

Comment [VIIP3]: This section (3) should go in the Stream Channel Erosion section 3-8 below. It is the same as (c) in 3-8.

Deleted: §
§

Deleted: 3-7. Water Quantity§

§
The following technical criteria and standards set out in this section shall be met for any activities subject to the requirements of a stormwater management plan

Formatted: Strikethrough

Deleted: article II of this ordinance

Deleted: : §

§
(1) Post-development runoff rate of flow and runoff characteristics shall replicate, as nearly as practicable, the pre-development runoff rate of flow and characteristics. §

§
(2) Infiltration shall be facilitated through the use of structural and non-structural methods. §

§
(3) The County may determine that some watersheds or receiving stream systems require enhanced criteria in order to address the increased frequency of bank-full flow conditions brought on by land development projects. In the event of such determination, then in lieu of the reduction of the 2-year post-development peak rate of runoff, the land development project being considered shall provide 24-hour extended detention of the runoff generated by the 1-year, 24-hour duration storm. §

Formatted: Strikethrough

Formatted: Strikethrough

Formatted: Strikethrough

Formatted: Font: 11 pt

Formatted: Font: 11 pt

²⁹ 4VAC50-60-60-(C)

³⁰ 4VAC50-60-70

disturbing activities. Therefore, in lieu of the reduction of the two-year post-development peak rate of runoff as required in subsection B of this section, the land development project being considered shall provide 24-hour extended detention of the runoff generated by the one-year, 24-hour duration storm.

Formatted: Font: 11 pt

(d) Any land-disturbing activity that provides for stormwater management intended to address any flow rate capacity and velocity requirements for natural or manmade channels shall be deemed to satisfy the flow rate capacity and velocity requirements for natural or manmade channels if the practices are designed to:

(1) Detain the water quality volume and to release it over 48 hours;

(2) Detain and release over a 24-hour period the expected rainfall resulting from the one year, 24-hour storm; and

(3) Reduce the allowable peak flow rate resulting from the 1.5, 2, and 10-year, 24-hour storms to a level that is less than or equal to the peak flow rate from the site assuming it was in a good forested condition, achieved through multiplication of the forested peak flow rate by a reduction factor that is equal to the runoff volume from the site when it was in a good forested condition divided by the runoff volume from the site in its proposed condition, and shall be exempt from any flow rate capacity and velocity requirements for natural or manmade channels as defined in any regulations promulgated pursuant to §§10.1-562 or 10.1-570 of Virginia Erosion and Sediment Control Law, Title 10.1, Chapter 5, Article 4 (July 2006).

3.9. Flooding³¹

(a) Downstream properties and waterways shall be protected from damages from localized flooding due to changes in runoff rate of flow and hydrologic characteristics, including but not limited to, changes in volume, velocity, frequency, duration, and peak flow rate of stormwater runoff in accordance with the minimum design standards set out in this section.³²

Deleted:

(b) The 10-year post-development peak rate of runoff from the development site shall not exceed the 10-year pre-development peak rate of runoff.³³

Deleted: pre-developed

(c) Linear development projects shall not be required to control post-development stormwater runoff for flooding, except in accordance with a watershed or regional stormwater management plan.³⁴

3-10. Impounding structures

Deleted: Frequency

Impounding structures shall comply with applicable requirements of state Impounding Structure Regulations (4VAC50-20).

Formatted: Font: 11 pt

Formatted: Font: 11 pt

3-11. Stormwater drainage easements

Deleted: ¶

¶

Storm drainage easements shall be required on lots or parcels where the conveyance, storage or treatment of stormwater is proposed or can reasonably be expected to occur, and the easements shall be computed and identified in accordance with the stormwater management design manuals.

Deleted: impoundment structures or facilities

Deleted: (a) Stormwater management impoundment structures and facilities shall comply with the provisions of 4VAC 50-60-50 and shall be constructed outside wetlands and streams.¶

¶
(b)

³¹ 4VAC50-60-80

³² 4VAC50-60-80(A)

³³ 4VAC50-60-80(B)

³⁴ 4VAC50-60-80(D)

3-12. Regional or watershed management planning³⁵

(a)The program administrator shall have the authority to develop regional stormwater management plans. The objective of a regional stormwater management plan is to address the stormwater management concerns in a given watershed with greater economy and efficiency by installing regional stormwater management facilities versus individual, site-specific facilities. The result will be fewer stormwater management facilities to design, build and maintain in the affected watershed. It is also anticipated that regional stormwater management facilities will not only help mitigate the impacts of new development, but may also provide for the remediation of erosion, flooding or water quality problems caused by existing development within the given watershed. If developed, a regional plan shall, at a minimum, address the following:

Deleted: County

Deleted: or watershed

Formatted: Font: 11 pt

Deleted: to address the stormwater management concerns in a given watershed with greater economy and efficiency by installing regional stormwater management facilities versus onsite stormwater management facilities

Formatted: Font: 11 pt

1. The specific stormwater management issues within the targeted watersheds.

2. The technical criteria in 4VAC50-60-40 through 4VAC50-60-80 as needed based on subdivision 1 of this section.

3. The implications of any local comprehensive plans, zoning requirements, local ordinances pursuant to the Chesapeake Bay Preservation Area Designation and Management Regulations adopted pursuant to the Chesapeake Bay Preservation Act, and other planning documents.

4. Opportunities for financing a watershed plan through cost sharing with neighboring agencies or localities, implementation of regional stormwater utility fees, etc.

5. Maintenance of the selected stormwater management facilities.

6. Future expansion of the selected stormwater management facilities in the event that development exceeds the anticipated level.

(b)In addition to the other requirements of this chapter, land development projects which are located in a watershed identified for a regional stormwater management facility in the county shall comply with the following:

Deleted: ¶

¶
(1)The County may allow multiple applicants performing land development project activities in the same watershed area to submit a regional stormwater management plan.¶

¶
(2)A regional plan must collectively address the provisions of this chapter for all land development project activities to be covered under the plan. ¶

(1)the requirements for stormwater management plans identified in article II of this ordinance,

(2)a stormwater management plan which provides an analysis of the impacts of the development on the watershed and the regional facility based on hydraulic and hydrologic modeling for the one-year, two-year, ten-year, and 100-year storms. The applicant shall provide an analysis that is consistent with professional engineering standards and the stormwater management design manuals.

(3)development projects located in a watershed where a regional facility is identified for construction in the county may be required to establish interim on-site controls, in lieu of permanent controls, for stormwater quantity and/or quality control until the regional facility is constructed, as deemed necessary by the County. Where interim controls are required, the applicant shall submit stormwater

³⁵ 4VAC50-60-90

management plans and designs along with all associated pertinent information in accordance with this article to program administrator. The program administrator shall determine if the interim controls proposed meet the intent of this article and shall notify the applicant of his or her determination.

(4) development projects that drain to an existing regional stormwater management facility may be required to implement supplemental on-site stormwater management controls when the regional facility does not provide all the required controls as determined by the program administrator.

3-13. Construction of stormwater management facilities; inspections.

(a) Construction of stormwater management facilities shall be in accordance with the approved stormwater management plan for a project.

(b) Inspections during construction:

(1) The person responsible for carrying out the plan shall be required to provide inspection monitoring and reports to ensure compliance with the approved plans and specifications. Except in circumstances where the County determines it to be unnecessary, a certified inspection of all aspects of BMP construction is required, including surface as-built surveys, geotechnical inspections during subsurface or backfilling, riser and principal spillway installation, bioretention soil placement and compaction activities. Inspections shall be conducted in accordance with the latest version of the Erosion and Sediment Control Regulations ([4VAC50-30-60](#)) promulgated pursuant to Article 4 (§10.1-566) of Chapter 5 of Title 10.1 of the Code of Virginia.

(2) Essential elements of required construction inspections shall include:

Formatted: No underline

(i) Inspection immediately following preliminary site preparation, including stripping of vegetation, stockpiling of soil, and construction of temporary stormwater management facilities.

(ii) Inspections during construction of the permanent stormwater management facilities.

(iii) Final inspection of the project to ensure that stormwater management facilities have been constructed in accordance with the approved stormwater management design plan and specifications and the stormwater management design manuals.

(3) The applicant must notify the County in advance of the proposed date of commencement of construction. A preconstruction conference between the county, the applicant, and the person(s) performing the work shall be required prior to initial commencement of construction. Among the matters to be taken up at the conference shall be the identification of measures and components that will require inspection.

(i) Thereafter, the applicant shall also notify the County in advance of commencement of construction of any critical component(s) of a stormwater management facility, and the County may require additional conferences, as it deems necessary.

(ii) If, at any stage of the development, the county determines that the soil or other physical conditions on the site are not as stated or shown on the approved stormwater management plan, or the county determines that the storm drainage system or stormwater management facility is inadequate or not constructed as shown on the approved stormwater management design plan, the county may refuse to approve further work and the county may revoke existing permits or approvals until a revised stormwater management design plan has been submitted and approved.

(b) All inspections shall be documented and written reports prepared that contain the following information:

(1) The date and location of the inspection;

(2) Whether construction is in compliance with the approved stormwater management plan;

(3) Variations from the approved construction specifications; and

Deleted: ¶

(4) Any violations that exist.

(c) The County ~~shall conduct on-site visits at least once in every two-week period, within 48 hours following any runoff producing storm event, and at the completion of the project prior to the release of any performance bonds~~ to monitor compliance with the approved stormwater plan.

Deleted: may

Deleted: periodic

(d) Upon completion of construction of stormwater management facilities, and prior to the release of any performance security or bond:

(1) The applicant shall provide a certification that the completed project is in accordance with the approved stormwater management plan. Certification of compliance with the construction specifications, material specifications, and integrity of all storm drainage and stormwater management facilities and their appurtenant structures shall be provided by a professional licensed in Virginia to perform such work; and

(2) A final site visit by the County or its designee must be completed; and

(3) The applicant may be required to submit as-built plans for any stormwater management facilities. As-built plans must show the final design specifications for the stormwater management facilities and must be certified by a professional engineer. Three (3) sets of certified as-built plans meeting the specifications documented in the stormwater management design manuals, may be required by the program administrator upon completion of the project. Each as-built plan shall have a certification statement by a professional licensed in Virginia to perform such work. An electronic copy of as-built plans may be submitted in place of the three copies if preferred by applicant.

3-14. Post-construction maintenance and inspections.

(a) All stormwater management facilities shall be subject to the requirement of ongoing, periodic inspections. The frequency of inspections shall be as specified in the applicable maintenance covenant; however, in the absence of any specification such facilities shall be subject to at least an annual inspection. The purpose of the inspections shall be to verify that the facilities remain in good working order.

(b) In the event that the stormwater management facility has not been adequately maintained and/or becomes a danger to public safety or public health, the County shall notify the responsible property owner by certified

mail, to the owner's address of record in the County's tax records. The notice shall specify the measures needed to comply with the maintenance covenant and shall specify the time within which such measures shall be completed. If the responsible party fails or refuses to meet the requirements of the maintenance covenant, the County, after reasonable notice, may correct a violation of the design standards or maintenance needs by performing all necessary work to place the facility in proper working condition, and recover the costs from the owner.

(c) All maintenance activities shall be performed in accordance with standard maintenance practices for the particular stormwater management facilities and the criteria set forth within applicable stormwater management design manuals.

3-15. Administration and enforcement.

(a) The Board of Supervisors shall administer and enforce the provisions of this article, acting by and through an authorized county official, employee or agent (the "Administrator"). The Administrator shall serve as the approving authority for applications and plans submitted pursuant to this ordinance. A person who is aggrieved ("aggrieved person") by a final decision of a County official or employee pursuant to this ordinance shall have the right of review of such action by the Board of Supervisors. Any such appeal shall be filed in writing with the Clerk of the Board of Supervisors within thirty (30) days from the date of the decision sought to be reviewed.

Formatted: No underline

Formatted: No underline

Formatted: No underline

Formatted: No underline

(b) The County will utilize the policy, criteria and information including specifications and standards of the Virginia Stormwater Management Handbook as amended (or local equivalent) and LID handbooks acceptable to the County, for the proper implementation of the requirements of this ordinance. This Handbook includes a list of acceptable stormwater treatment practices, including the specific design criteria for each stormwater practice. The Handbook may be updated and expanded from time to time, based on improvements in engineering, science, monitoring and local maintenance experience. (c) The County may establish reasonable interpretive guidelines for the administration of this article, including without limitation the designation of acceptable LID manuals.

Deleted: Stormwater treatment practices that are designed and constructed in accordance with these design and sizing criteria will be presumed to meet the minimum water quality performance standards.

Formatted: Strikethrough

3-16. Enforcement and penalties.

(a) Upon a determination by the County that an owner has failed to comply with an approved stormwater management plan, the following procedures shall apply:

(1) The County shall serve upon the owner a written notice to comply. The notice shall be hand-delivered to the owner; mailed to the owner by certified mail, at his address of record in the County's tax records; or hand-delivered to the owner's agent or employee at the site of the work that is the subject of the non-compliance. The written notice shall specify the corrective measures required to achieve compliance with the approved stormwater management plan, and it shall specify the time within which such required measures must be completed.

(2) A person receiving a written notice to comply may be required cease all construction activities. Thereafter, no additional work shall proceed until violations are corrected and work previously completed has received approval by the County.

(3) If the owner fails to complete corrective measures specified in a written notice to comply within the time specified in the notice, then the County may revoke the approved stormwater permit, and may revoke any building permit and other permit(s) for development activities at the site, and the owner shall be deemed to be in violation of this article.

(b) Any person who violates any provision of this article shall be guilty of a misdemeanor and shall be subject to a fine not exceeding \$1,000, up to thirty days imprisonment, or both, for each violation.

(c) The County may apply to the Madison County Circuit Court to enjoin a violation or a threatened violation of the provisions of this article, without the necessity of showing that an adequate remedy at law does not exist.

(d) Without limiting the remedies which may be obtained pursuant to this section, the County may bring a civil action against any person for violation of any provision of this article, or of any term or condition of a permit, plan or maintenance agreement. The action may seek the imposition of a civil penalty of not more than \$2,000 against the person for each violation.

(e) With the consent of any person who has violated or failed, neglected or refused to obey or comply with any provision of this article or with any term or condition of a permit, plan or maintenance agreement, the County may provide, in an order issued by it against such person, for the payment of civil charges for violations in specific sums, not to exceed the limit specified above in paragraph (3). Such civil charges shall be in lieu of any civil penalty which could be imposed under paragraph (3).

(f) No certificate of occupancy shall be issued by the building official until he has verified with the County that stormwater facilities located on a property are in compliance with the requirements of this article.

3-17. Saving provision; severability.

Deleted: ¶

(a) This ordinance is not intended to interfere with, abrogate, or annul any other ordinance, rule, regulation, statute, or other provision of law. The requirements of this ordinance should be considered minimum requirements, and where any provision of this ordinance imposes restrictions different from those imposed by any statute, regulation or ordinance, whichever provisions are more restrictive or impose higher protective standards for human health or the environment shall be considered to take precedence.

(b) If the provisions of any article, section, subsection, paragraph, subdivision or clause of this ordinance shall be judged invalid by a court of competent jurisdiction, such order of judgment shall not affect or invalidate the remainder of any article, section, subsection, paragraph, subdivision or clause of this ordinance.